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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/631,982 07/31/2003 Lyle E. Bergeleen 47856.1.0 2209 7590 09/21/2004 **EXAMINER** James R. Haller NGUYEN, SON T Fredrikson & Byron, P.A. ART UNIT PAPER NUMBER 4000 Pillsbury Center 200 South Sixth Street 3643 Minneapolis, MN 55402-1425

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	on No	Applicant(s)	
Office Action Summary				$\Box$	
		10/631,98		BERGELEEN	
•	Office Action Summary	Examiner		Art Unit	
	MAILING DATE of this commun	Son T. Ng		3643	· · · · · · · · · · · · · · · · · · ·
Period for Re	ne MAILING DATE of this commun eply	ncauon appears on un	e cover sneet with the t	orrespondence addres	<b>3</b>
THE MAII  - Extensions after SIX (the perional of the perion	FENED STATUTORY PERIOD F LING DATE OF THIS COMMUN of time may be available under the provisions b) MONTHS from the mailing date of this common d for reply specified above, the maximum side for reply is specified above, the maximum side ply within the set or extended period for reply received by the Office later than three months tent term adjustment. See 37 CFR 1.704(b).	ICATION. s of 37 CFR 1.136(a). In no even nunication. so) days, a reply within the state tatutory period will apply and with the state of the apply and with the state of the apply and with the state of the apply and with the apply and with the apply and with the apply and with the apply and will, by statute, cause the apply and will, by statute, cause the apply and will, by statute, cause the apply and will, apply and will, by statute, cause the apply and will, apply and will apply apply and will apply and will apply apply and will apply apply apply apply apply and will apply	ent, however, may a reply be tinutory minimum of thirty (30) day III expire SIX (6) MONTHS from lication to become ABANDONE	nely filed s will be considered timely. the mailing date of this commun D (35 U.S.C. § 133).	nication.
Status					
1)⊠ Res	sponsive to communication(s) file	ed on 31 July 2003.			
· · · · · · · · · · · · · · · · · · ·	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
′=	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
clos					
Disposition (	of Claims				
	im(s) 1-11 is/are pending in the	application.			
•	4a) Of the above claim(s) is/are withdrawn from consideration.				
	5) Claim(s) is/are allowed.				
6)⊠ Cla	6) Claim(s) 1-5 and 7-11 is/are rejected.				
7)⊠ Cla	7)⊠ Claim(s) <u>6</u> is/are objected to.				
8)∏ Cla	im(s) are subject to restri	ction and/or election r	equirement.		
Application	Papers				
9) <u></u> The	specification is objected to by th	ne Examiner.			
10)⊠ The drawing(s) filed on <u>31 July 2003</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.					
Арр	olicant may not request that any obje	ection to the drawing(s) t	e held in abeyance. Se	e 37 CFR 1.85(a).	
Rep	placement drawing sheet(s) including	g the correction is requir	ed if the drawing(s) is ob	jected to. See 37 CFR 1.	.121(d).
11) <b>□</b> The	oath or declaration is objected t	o by the Examiner. No	ote the attached Office	Action or form PTO-1	<b>52</b> .
Priority unde	er 35 U.S.C. § 119				
·	nowledgment is made of a claim	for foreign priority un	der 35 U.S.C. § 119(a	)-(d) or (f).	
a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received.					
1.L	<ul><li>Certified copies of the priority</li></ul>			ion No	
2.L 3.[			• •		ne e
5.∟	application from the Internation	•		ca iii tiiis Hationai Otaş	<b>,</b> C
* See	the attached detailed Office action	· · · · · · · · · · · · · · · · · · ·		ed.	
			·		
Attachment(s)					
1) Notice of	References Cited (PTO-892)		4) Interview Summary		
	Draftsperson's Patent Drawing Review (		Paper No(s)/Mail D	ate Patent Application (PTO-152	)\
	on Disclosure Statement(s) (PTO-1449 o (s)/Mail Date <u>10/27/03</u> .	FP10/SB/08)	6) Other:	atent Application (F 10-132	•

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### **DETAILED ACTION**

## **Drawings**

- 1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "22" has been used to designate both insert and rod. Reference character "22.1, 22.2" has been used to designate both side portions and legs. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 24.5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the

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changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 22.5. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Claim Objections

4. Claim 1 is objected to because of the following informalities: in line 4, "ne" should be changed to ---one---. Appropriate correction is required.

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-5,7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 1476867 (herein 867) in view of US 4691782 (herein 782).

For claim 1, 867 teaches a horseshoe capable of flexion with the hoof of a horse, the horseshoe comprising side portions and a portion bridging the side portions at their ends to provide the horseshoe with a generally U shaped configuration to fit the hoof of a horse (see fig. 1), the horseshoe comprising a molded body 27,23 comprising rubber and having, as an insert, an elongated springy metal member 78 having sufficient resilience as to enable the shoe to expand as a horse's hoof to which the shoe is attached expands as the hoof is pressed against the ground, and to contract to essentially its initial configuration as the pressure on the hoof is released. However, 867 is silent about the body being molded from polyolefin polymers.

782 teaches horseshoe made out of polyolefin polymers (see abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the horseshoe body of 867 out of polyolefin polymers as taught by 782, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use (for shock or vibration) as a matter of obvious choice.

For claim 2, in addition to the above, 782 teaches polyethylene (col. 4, lines 10-15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the horseshoe body of 867 out of polyethylene as taught by 782, since it has been held to be within the general skill of a worker in the art

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to select a known material on the basis of its suitability for the intended use (for shock or vibration) as a matter of obvious choice. In addition, it would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the horseshoe body of 867 as modified by 782 out of a ultra high molecular weight polyethylene, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use (for shock or vibration) as a matter of obvious choice.

For claim 3, 867 as modified by 782 (emphasis on 867) further teaches wherein said insert includes side portions (ref. 78 runs along the horseshoe) extending for a portion of the length of the respective side portions of the body but terminating rearwardly at positions spaced from rearward ends of the side portions of the body (where ref. 78 ties in at the last knob 79).

For claim 4, 867 as modified by 782 (emphasis on 867) further teaches wherein said elongated insert is generally U shaped and is of substantially uniform cross section throughout its length (as shown).

For claim 5, 867 as modified by 782 (emphasis on 867) further teaches wherein said insert is generally U-shaped (running along the U shape body) and has a central portion at the front end portion of the body and side portions extending rearwardly from respective ends of the central portion.

For claim 7, 867 as modified by 782 (emphasis on 867) further teaches wherein said insert side portions terminate rearwardly in ends terminating short of the ends of the body side portions (where ref. 78 ties in at the last knob 79).

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For claim 8, 867 as modified by 782 (emphasis on 867) further teaches wherein said rearward ends of said side insert portions include portions angled from the length direction of such side insert portions to grip the body of the horseshoe and restrain longitudinal movement of the insert with respect to the body. The wire 78 is zigzagged through the body so at the end, it is angled as shown in fig. 16.

For claim 9, 867 as modified by 782 (emphasis on 867) further teaches wherein said body includes a supportive metal insert 24 contributing rigidity to the body and restraining the body from movement other than in its plane. However, 867 as modified by 782 is silent about the insert 24 being a metal mesh. It would have been an obvious substitution of functional equivalent to substitute the thin metal insert of 867 as modified by 782 with a metal mesh insert, since both inserts would perform to further reinforce the horseshoe. Note, page 6 of applicant's disclosure states, "As shown in Figure 4, a rod 22 may be employed in conjunction with a metal plate or screen 22.4 to form the insert. In a desired embodiment, the screen is in the form of a mesh or other perforated metal member made preferably of steel or aluminum, and is employed as an internal stiffener to provide additional strength and rigidity to the body and to restrain the body from movement other than in its plane", which implies that a metal plate would function to do the same just as a metal mesh insert, therefore, they would be functional equivalent.

For claim 10, 867 teaches a method of shoeing a horse, comprising providing a horseshoe having a molded body 23,27 comprising rubber and containing a springy metal insert 78 having a predetermined modulus of elasticity and an elastic limit;

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bending the horseshoe beyond the elastic limit of the insert so that the horseshoe is configured to fit the hoof of a horse; and attaching the horseshoe to the horse's hoof. However, 867 is silent about the body being molded from polyolefin polymers.

782 teaches horseshoe made out of polyolefin polymers (see abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to manufacture the horseshoe body of 867 out of polyolefin polymers as taught by 782, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use (for shock or vibration) as a matter of obvious choice.

For claim 11, see explanation for claim 2.

# Allowable Subject Matter

- 7. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son T. Nguyen whose telephone number is (703) 305-0765. The examiner can normally be reached on Monday Friday from 9:00 a.m. to 5:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon, can be reached at (703) 308-2574. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (703) 872-9325. The official fax number is 703-872-9306.

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Son T. Nguyen Primary Examiner, GAU 3643 September 19, 2004